



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,801	04/15/2004	M. Scott Jones	120462	6651
30330	7590	02/28/2006		
MCQUAIDE BLASKO 811 UNIVERSITY DRIVE STATE COLLEGE, PA 16801			EXAMINER LOCKETT, KIMBERLY R	
			ART UNIT 2837	PAPER NUMBER

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

EK

Office Action Summary

Application No.

10/824,801

Applicant(s)

JONES, M. SCOTT

Examiner

Kim R. Lockett

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/19/05.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 21 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/15/05

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "strings of at least one string unison of said instrument" is not understood.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 and 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kovach (4452122) in view of Gilmore (5756913).

Kovach (4452122) discloses the use of a unison string instrument containing a device for increasing tuning longevity comprising: a coupling positioned and fastened between two or more strings of at least one string unison of said instrument (see figure 1).

Kovach (4452122) does not disclose the specific use of enabling the coupled strings to oscillate in unison.

Gilmore (5756913) discloses the use of a unison string instrument that enables the coupled strings to oscillate in unison (column 3, lines 10-15). Gilmore further discloses the use of a crimping tool(55) that is capable of installing a coupling that supplies a level of compression sufficient for enabling the strings to oscillate in unison at a desired pitch.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tuning device as disclosed by Kovach (4452122) with crimping tool and specific tuning capabilities as disclosed by Gilmore (5756913) in order to provide an efficient means of tuning strings for pianos.

3. Claims 5,6, and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kovach (4452122) in view of Gilmore and Ignatius.

Kovach (4452122) and Gilmore (5756913) do not disclose the use of a shaped piece of metal.

Ignatius disclose the use of a shaped piece of metal (column 6, lines 35-40) an open curved band so that the band compresses (column 4, lines 26-40) when placed over two adjacent strings. The clip as disclosed by Ignatius also discloses the use of opposing forces on the strings (column 3, lines 60-68) thereby limiting the frequencies.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tuning device as disclosed by Kovach (4452122) with

crimping tool and specific tuning capabilities as disclosed by Gilmore (5756913) and the metal material as disclosed by Ignatius in order to provide tuning and frequency control for strings for musical instruments.

Response to Arguments

3. Applicant's arguments with respect to claims 1-20 and the Gilmore ('738) reference have been considered but are moot in view of the new grounds of rejection.

4. Applicant's arguments filed 8/19/05 with regards to the Gilmore (5756913) and Ignatius references have been fully considered but they are not persuasive. With regards to the applicant's arguments regarding the lack of a coupling in the Gilmore ('913) reference, Kovach clearly discloses the use of a coupling for tuning strings in unison (column 1, lines 20-25). And Gilmore (5756913) discloses the use of a unison string instrument that enables the coupled strings to oscillate in unison (column 3, lines 10-15). With regards to the Ignatius reference, Ignatius discloses the use of a piece of material where "heavy metals and their alloys, particularly noble metals also, fall into consideration". So the clip as disclosed by Ignatius can be made from metal (column 6, lines 35-40). In response to applicant's argument that the device as disclosed by Ignatius is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24

USPQ2d 1443 (Fed. Cir. 1992). In this case, Ignatius clearly discloses the metal structure as recited by the applicant .

Papers related to this application may be submitted to Group 2800 by facsimile transmission. Papers should be faxed to Group 2800 via the PTO 2800 Fax Center at 703-872-9306.

For assistance in **Patent procedure, fees or general Patent questions** calls should be directed to the **Patents Assistance Center (PAC)** whose telephone number is **800-786-9199**. Assistance is also available on the Internet at www.uspto.gov.

Any inquiry concerning **this communication or earlier communications from the examiner** should be directed to **Kim Lockett** whose telephone number is **(703) 308-7615**, after 2/3/04 my new number will be **(571) 272-2067**. The examiner can normally be reached on Tuesday through Friday from 6:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (571) 272-2107.

Papers related to this application may be submitted to Group 2800 by facsimile transmission. Papers should be faxed to Group 2800 via the PTO 2800 Fax Center at 703-872-9306.

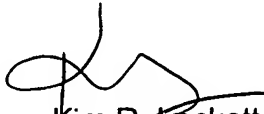
For assistance in **Patent procedure, fees or general Patent questions** calls should be directed to the **Patents Assistance Center (PAC)** whose telephone

Art Unit: 2837

number is 800-786-9199. Assistance is also available on the Internet at www.uspto.gov.

Any inquiry concerning **this communication or earlier communications from the examiner** should be directed to **Kim Lockett whose telephone number is (703) 308-7615, after 2/3/04 my new number will be (571) 272-2067.** The examiner can normally be reached on Tuesday through Friday from 6:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (571) 272-2107.



Kim R. Lockett
Examiner
Art Unit 2837